



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

INCOME TAX STATISTICS.

BY ROLAND P. FALKNER, PH.D., *Statistician, National Civic Federation.*

The adoption of a federal income tax has led students of economics and of public finance to hope for some illuminating material upon the distribution of national income and the operations of the tax. While the results as published in the annual report of the Commissioner of Internal Revenue are worthy of study, they are somewhat of a disappointment. This follows in part from the fact that the system is in its infancy, since the law as a whole affected the income of the year 1913 for ten months only and not the entire year, and since the provisions of the law regarding withholding at the source were operative for the last two months of the year only, and in part from the fact that the information given in the report is somewhat crude in form and meagre in detail.

TABLE I.
INCOME RETURNS FOR 1913.

Incomes for Ten Months, Ending December 31, 1913.		Equivalent Annual Incomes.		
Class in Thousand Dollars.	Number of Returns.	Class in Thousand Dollars.	Number of Thousand Dollars in Each Class.	Number of Income Returns per Thousand Dollars in Each Class.
2½ to 3½	79,426	3 to 4	1	79,426
3½ to 5	114,484	4 to 6	2	57,242
5 to 10	101,718	6 to 12	6	16,953
10 to 15	26,818	12 to 18	6	4,470
15 to 20	11,977	18 to 24	6	1,995
20 to 25	6,817	24 to 30	6	1,136
25 to 30	4,164	30 to 36	6	694
30 to 40	4,553	36 to 48	12	379
40 to 50	2,427	48 to 60	12	202
50 to 75	2,618	60 to 90	30	87
75 to 100	998	90 to 120	30	33
100 to 150	785	120 to 180	60	13
150 to 200	311	180 to 240	60	5
200 to 250	145	240 to 300	60	2
250 to 300	94	300 to 360	60	1.5
300 to 400	84	360 to 480	120	0.7
400 to 500	44	480 to 600	120	0.4
500 to 1,000	91	600 to 1,200	600	
1,000 and over	44	1,200 and over		

The most general information given in the official report concerns the number of individual incomes for which returns were made.* This is given in a table and chart, the essential features of the table being reproduced in the first two columns of the accompanying Table I. The remaining columns have been added by the writer to bring out the significance of the official figures.

The fact that the returns are for a period of ten months from March 1, 1913, to December 31, 1913,† and not for the calendar year 1913, has been lost sight of in most of the popular discussion of the results. It has, therefore, seemed desirable to add a column showing the annual equivalents for the different income classes given in the table.‡

The table contains a complete showing of all income returns, the obligation to make a return being imposed upon all persons having an annual income of \$3,000 and upwards, or who had for the ten months, March to December, 1913, an income of \$2,500 or upwards. Since married persons enjoy an exemption of \$4,000, the returns include some incomes not subject to taxation. No record of this number is given in the report, information concerning the number of married and "single" persons being given not by classes of income but only for the whole number of returns.

The facts given in the second column as to the number of returns in each income group have been widely published by the press and much surprise has been expressed over the fact that the second group of the table is larger than the first. It has been cited as a very singular phenomenon, quite contrary to our general impressions, that smaller incomes are much more numerous than larger ones. The ingenious explanation

* For the United States as a whole the information is given in a chart and table facing p. 20, for collection districts on pp. 110-111, and for states on pp. 112-113.

† The chart and table facing p. 20 somewhat confuse the matter by referring to the returns as being for the taxable period, March 1 to December 31, 1914.

‡ In transforming the income classes given in the table into their annual equivalents, it has been assumed that the income reported for the ten months was five sixths of the annual income. In view of the fact that the months omitted were those of January and February, 1913, in which fall so many of the payments of interest on securities, it is more than likely that the remaining ten months represent somewhat less than five sixths of the annual income for the year. But as there is no way of estimating with precision the actual difference, we have throughout this paper generally assumed that annual incomes would be one fifth larger than those reported in 1913.

has even been offered that among the smaller income group there may have been an extraordinary amount of tax dodging.

An examination of the table will show that this apparently anomalous statistical fact results merely from the irregular grouping of incomes. If attention be given to the equivalent annual incomes it will be seen that incomes of the first group have a range of \$1,000, those of the second of \$2,000, and those of the third of \$6,000. In the final column of the table here printed is a statement of the number of incomes for each \$1,000 included in each group. It will be noted that in this column the distribution of incomes accords better with our general information. Not only is the first group more numerous than the second, but the third group which, in the original statement is nearly as large as the second, becomes only slightly more than one fourth as great.

The misleading impression of the official table is heightened by the accompanying chart. For the purpose of showing how a chart should not be prepared, it is reproduced here for comparison with a chart which gives a clearer view of the distribution of incomes.

A comparison of these general results with the experience of European countries, which have long had income taxes, is tempting but difficult. The British income tax is more complicated in its details than the American tax, and the official returns show the sources of income but do not show the whole number of incomes taxed. From time to time various writers have attempted estimates of the number of persons receiving incomes of a certain size. With the aid of figures drawn from taxes on legacies and on houses, Mr. L. G. Chiozza-Money* has estimated that in 1908-09 there were in the United Kingdom 280,000 persons in receipt of incomes in excess of £700 (\$3,406). A comparison with the estimated population shows this number to be equivalent to 625 per 100,000. Though the minimum is higher in this estimate than in the United States the proportion of persons receiving these incomes is notably superior to that which results from our income tax figures. In Continental Europe incomes are taxed directly and the number of taxable incomes is available in the official records.

* *Riches and Poverty*, 1910.

The exemptions are commonly much less than in the United States and the whole number of incomes taxed cannot therefore be compared with the similar figures here. While statements for certain countries are available by income classes, the divisions used in the foreign figures do not permit an exact comparison. The last edition of Conrad's *Handwörterbuch der Staatswissenschaften* gives a very full statement of income statistics from which some facts may be selected which at least in a rough way may be compared with the figures for the United States. Such figures are given in Table II.

TABLE II.

INCOMES IN FOREIGN COUNTRIES AND THE UNITED STATES COMPARED.

Country.	Year.	Incomes above (Dollars.)	Number.	Population.	Incomes per 100,000 of Population.
France.....	1907	4,000	64,000	(a) 39,252,267	163
Austria.....	1907	2,400	25,600	27,729,500	113
German States					
Prussia.....	1908	2,375	105,000	38,026,556	276
Hamburg.....	1901	2,500		(b) 768,349	884
Saxony.....	1906	3,000	12,500	(c) 4,508,601	287
United States (d).....	1913	3,000	356,579	96,765,563	368
	1913	4,000	277,499	96,765,563	287

a) 1906. (b) 1900. (c) 1905. (d) Excluding Alaska, Hawaii and Porto Rico.

The lowest income here noted is that which approaches most closely in the respective classifications to the United States minimum. Numbers differ widely according to the size of the countries considered, and reference to the population is necessary. France and Austria present a marked contrast, though the lower limit of incomes referred to is much higher in France, which has the largest proportion of such incomes. Austria, with a minimum income \$600 lower than the United States has not even one third as many incomes above the minimum. Comparing incomes above \$4,000, France has somewhat more than half as many as the United States. For the German Empire there is no imperial income tax, but such taxes are found in most of the states. The table shows figures for Saxony for the incomes above the \$3,000 minimum, which are a little more than three fourths as numerous as in the United States. In Prussia incomes in excess of

\$2,400 in round numbers appear to be somewhat less than three fourths as frequent in proportion to the population as are incomes in excess of \$3,000 in the United States. Hamburg shows a percentage of incomes above \$2,500 much higher than the figures for the United States. This higher percentage is not due to the lower minimum but rather to the fact that Hamburg is a rich city, the centre of the lucrative foreign commerce of the Empire. In the United States no separate figures are published for corresponding city areas, such as New York, Chicago, and Philadelphia. But we shall see later that as high a proportion to the population is found in New York State as a whole as in the city of Hamburg.*

The foregoing comparisons suffer under the fact that for the different countries compared the minimum income for which figures are given differs. This inconvenience can be removed, at the cost however of accuracy of statement, by estimating the number of incomes superior to \$3,000 per annum for the purpose of comparing such estimate with the population and with the figures for the United States. In order to make such an estimate all the facts concerning the incomes in these countries were plotted in curves in such way that the height of the ordinate at any given point represented the whole number of reported incomes above that point. The curves for the different countries, with the exception of Saxony where the figure was already known, gave the following estimates of the number of incomes above \$3,000 in the various countries, by means of which we have calculated the number per 100,000

Country.	Incomes of \$3,000 and over.	
	Number.	Per 100,000 of the Population.
Austria.....	20,000	59
France.....	95,000	242
Prussia.....	75,000	197
Hamburg.....	—	700
Saxony.....	12,500	287
United States.....	356,579	368

* The second and third New York collection districts include the Borough of Manhattan. In these two districts the incomes returned numbered 50,049. If we compare this number with the population of Manhattan Borough, as returned in the Census of 1910, we find the unusual number of 2,142 returns per 100,000 inhabitants. Of course it is to be remembered that the taxes are paid at the principal place of business, and that not all who paid taxes in Manhattan are residents of that Borough.

of the population. In more convenient form this estimate shows the larger number of incomes of \$3,000 and upwards which is reported in the United States as compared with all of the countries included in the comparison except the city of Hamburg.

In making these comparisons there is tacit assumption that the incomes reported in the United States are a full and complete indication of the wealth of individuals in this country but there is much reason to doubt whether the total number of returnable incomes actually in existence in the United States found its way into the treasury reports. The system of income taxation is in its infancy and it is more than probable that a considerable number of taxable incomes escaped the tax in the first year of its operation. Under the older and more vigilant administration of the tax in European countries a fuller report of all taxable incomes is probable. In presenting the figures given in Column 2 of Table I, the Secretary of the Treasury makes this comment upon the completeness of the returns:

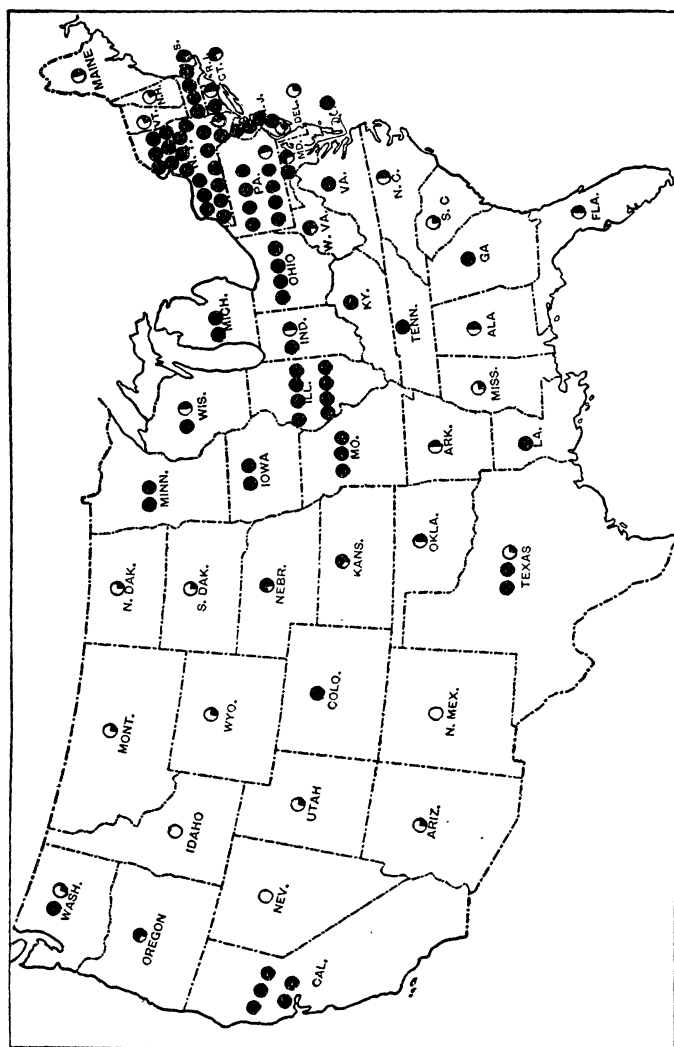
"It is obvious, upon the face of the returns, that there were more than 79,426 persons out of a total population of approximately a hundred million in this country who had net incomes of from \$2,500 to \$3,333 for 10 months—the taxable period for the calendar year 1913. It may be said with equal truth that there were more than 114,484 people out of our entire population who had a net income of from \$3,333 to \$5,000, and more than 101,718 people out of our entire population who had a net income of from \$5,000 to \$10,000 for the same period. It is clear that there were thousands of persons who failed altogether to make a return as required by law."

It will be noted that especial emphasis is laid in this statement upon the lowest income class and indeed a consideration of the figures themselves suggests that the returns in this class are not so full and complete as in the subsequent classes. Incompleteness of the returns, particularly in this class, might be due in part to a desire to evade the tax but it is much more probable that it results in large measure from ignorance of the requirements of the law. The greater number of persons whose income fell in 1913 in the first group—equivalent to

\$3,000 to \$4,000 per annum—are not in fact subject to taxation because they can claim the benefit of the \$4,000 exemption accorded married persons. That such persons are required to make returns although not subject to taxation is not generally known among the public and where it is known such persons are prone to be indifferent about making returns. If we knew how many of the persons who made returns in 1913 were not subject to taxation because of this exemption, we should be able to estimate how far the factor now under consideration had been at work in reducing the whole number of returns.

Returning to the specific information available in the report of the Commissioner of Internal Revenue concerning the incomes in the United States, our attention may first be directed to the geographical distribution of the returns, which is shown by the map accompanying this paper and by the tables which follow. The map shows the income tax returns to be numerous in a group of states extending from Illinois eastward to Massachusetts and in California. Elsewhere returns are comparatively few. When information concerning the income tax returns was first given to the public it received considerable attention in the press. Each newspaper was of course especially interested in its own state, but nearly all of them called attention to the fact that New York State alone had 81,972 returns, or over one fifth of the whole number. In explaining this preponderance, the relation of New York City in the large number of returns to the state was pointed out, but the fact that New York is also the largest state in population was overlooked. The states whose income returns numbered over 10,000 are given in Table III, giving the number of returns for the leading states, and also comparisons with the population.

DISTRIBUTION OF INCOMES SUBJECT TO INCOME TAX



Explanation:—Each dark circle represents 4,000 returns, each quadrant represents 1,000 returns, the last 1,000 being rounded off. Empty circles indicate less than 500 returns.

TABLE III.

NUMBER OF TAX RETURNS FOR INCOMES EQUIVALENT TO \$3,000 OR MORE
PER ANNUM, BY STATES.

Area.	Returns.					
	All Incomes.			Incomes of \$24,000 and over, Yearly.		
	Number.	Per 100,000 of the Population of April 15, 1910.		Number.	Per 100,000 of the Population of April 15, 1910.	
		Total.	Urban.		Total.	Urban.
United States (a).....	356,579	388	860	23,114	25	54
New York.....	81,972	899	1,141	7,323	80	102
Pennsylvania.....	34,226	447	741	2,719	35	59
Illinois.....	32,242	572	950	1,935	34	56
California.....	19,557	822	1,323	933	40	63
Massachusetts.....	19,314	581	618	1,906	57	61
Ohio.....	16,078	337	628	1,043	22	39
New Jersey.....	13,345	526	700	783	31	41
Missouri.....	11,816	359	845	642	19	46
Total for states named.....	228,550	590	884	17,284	45	67
Other states.....	128,029	241	764	5,830	11	35

(a) Excluding Alaska, Hawaii, and Porto Rico, from which 1,019 returns were received.

The eight states named in the table contain a little more than two thirds of all incomes returned, but they comprised a little more than four tenths of the population of the country in 1910. In making comparisons with the population the figures of the 1910 census have been used. The utility of such comparisons between different states would not be greatly enhanced by estimating the population of 1913. It may be remarked that for the United States as a whole the ratio of 388 income tax returns per 100,000 of the population of 1910 becomes 368 when the estimated population of 1913 is used. In the group of states here named, the returns per 100,000 inhabitants are more than twice as numerous as in the rest of the country. New York stands at the head of the list in the ratio to the population as well as in absolute numbers, though California follows close behind in the ratio. The order in relation to population does not follow that of absolute numbers.

It cannot fail to be noticed that the states named are those

which contain the largest cities within their limits.* As it is probable that comparatively few of the persons receiving annual incomes of \$3,000 and more live in rural communities, it has seemed desirable to establish a further ratio between the number of income tax returns and the urban population which as defined by the census comprises all persons living in communities of 2,500 inhabitants and upwards. Such a comparison shows that relatively the largest number of income tax returns is reported from California and not New York, the smallest number being from Massachusetts. Moreover there is comparatively little difference between this group of states and the rest of the country when ratios are established with the urban population only.

In the foregoing table incomes of \$20,000 and over for ten months in 1913, equivalent to annual incomes of \$24,000 and over, are shown separately. These are the incomes which in 1913 were subject to the additional tax. They are comparatively few in number, but are more frequent in the states here named than in the remainder of the United States.

The geographical distribution of \$3,000 incomes for the different sections of the country, which are familiar in census usage, with ratios to the total and urban population, is shown in Table IV.

*The results of the first assessment make it clear that the income tax is primarily an urban tax. Over 40 per cent. of the entire tax is assessed in Milwaukee city alone, and more than 80 per cent. in the seventeen Counties containing cities. . . . Measured by income there are plainly more persons capable of paying taxes in the city than in the country. . . . 6th Biennial Report of the Wisconsin State Tax Commission (1912), p. 31.

TABLE IV.

NUMBER OF TAX RETURNS FOR INCOMES EQUIVALENT TO \$3,000 OR MORE PER ANNUM BY DIVISIONS.

Area.	Returns.					
	All Incomes.			Incomes of \$24,000 Yearly, and over.		
	Number.	Per 100,000 of the Population of April 15, 1910.		Number.	Per 100,000 of the Population of April 15, 1910.	
		Total.	Urban.		Total.	Urban.
United States (a).....	356,579	388	860	23,114	25	50
The North.....	265,893	477	811	19,198	35	59
New England.....	32,277	493	592	2,956	45	54
Middle Atlantic.....	129,543	671	944	10,825	56	79
East South Central.....	68,720	430	714	3,996	22	42
West North Central.....	35,353	342	913	1,421	12	37
The South.....	55,736	190	842	2,376	8	36
South Atlantic.....	27,595	265	892	1,211	10	39
East South Central.....	10,690	142	679	427	5	27
West South Central.....	17,451	267	892	738	8	38
The West.....	34,950	512	1,050	1,540	23	46
Mountain.....	8,048	480	848	322	12	34
Pacific.....	26,902	1,113	1,129	1,218	29	51
East of Mississippi River.....	268,825	415	803	19,415	30	58
West of Mississippi River.....	87,754	322	959	3,699	14	40

(a) Excluding Alaska, Hawaii and Porto Rico, from which 1,019 returns were received.

This table confirms with greater detail that which preceded it. Returnable incomes are vastly more numerous in the North than in the South or West. But if reference be had to the total population it appears that relatively North and West have somewhere about the same number of returns, the advantage being for the West. The South falls far below. Quite different is the showing when comparisons are made with the urban population. In this comparison the South as well as the West exceeds the North in the number of returns. There is, however, less divergence among the various sections when the comparison is made with the urban population than when it is made with the general population. The distribution of returnable incomes among the different sections reflects, therefore, the distribution of urban population in those sections.

It may, however, be observed that the larger incomes are

more frequent in the older parts of the country. The largest proportions are found in New England and the Middle States. These divisions, with the Pacific division, are the only ones which exceed the average for the United States and appear in marked contrast to the other parts of the country.

With respect to the persons who pay the income tax, the report gives us the further information that 78,763 are single and 278,835 are married. It is to be remembered that in the income tax law these words have a significance different from that of the census and similar statistics. Under the income tax law the term married is only applicable to a married person who has a wife or husband, as the case may be, living with the person making the return. All other persons, whether bachelors or spinsters, separated, widowed or divorced, are single for the purposes of the income tax law. The "single" persons of the income tax payers are 28 per cent. of the total number, and in the population twenty-five years of age and upward such "single" persons are 26 per cent. of the total. It may also be noted that the 278,835 married persons represent 272,153 households, since 6,682 married women living with their husbands made a separate return of their incomes.

Concerning the income represented by these returns the report gives no definite information, though from the number of incomes and from the product of the tax some approximations may be made. The normal tax of 1 per cent. was levied upon incomes for ten months in 1913, in an aggregate amount of \$1,272,803,802. While this is the taxable income it falls short of the true income, first by the amount of the personal exemptions, and second by the income received in the form of dividends. The personal exemptions of \$2,500 for 78,760 single persons and of \$3,333.33 for 272,152 married persons amounted to \$1,104,084,166, which added to the taxable income makes a total of about \$2,400,000,000. An additional sum to represent dividend income would have to be added to obtain the total income.

While the figures printed in the report do not give directly the total income, either for the income tax payers as a whole or for any of the different income classes represented in statistics, such information, at least so far as the larger incomes

are concerned, can be derived with the expenditure of no little patience from the figures giving the results of the supertax. The supertax is paid on the entire income and is not subject to deductions either for personal exemptions or for income from dividends. It is paid at varying rates on the excess of total incomes over \$20,000. The report of the Commissioner of Internal Revenue gives the product of this tax according to the several rates of taxation, as follows:

Income Class, Thousands of Dollars.	Rate of Taxation. Per Cent.	Tax Collected.
20 to 50.....	1	\$2,934,754
50 to 75.....	2	1,645,639
75 to 100.....	3	1,323,023
100 to 250.....	4	3,835,948
250 to 500.....	5	2,334,583
500 and over.....	6	3,437,850
Total.....		\$15,511,797

The combination of the figures here given with those in a previous part of the report in regard to the number of incomes, enables us to analyze each of the several tax classes. Thus taxation at 1 per cent. falls in part on incomes exceeding \$20,000 but less than \$50,000, and in part on incomes exceeding \$50,000. We know the aggregate amount of tax which is paid at the rate of 1 per cent. It is obvious that on all incomes higher than \$50,000, the first \$30,000 over the untaxed minimum of \$20,000 is taxed at 1 per cent. As we know the number of such incomes the amount of the incomes so taxed can be determined and also the amount of the tax upon it. Having ascertained the taxation at 1 per cent. upon all incomes over \$50,000, we can deduct this from the total receipts at 1 per cent., to find how much is attributable to the first class, namely \$20,000 to \$50,000. The amount collected by this taxation multiplied by 100 represents the income which is so taxed.

A similar process can be applied to taxation at the rate of 2, 3, 4, and 5 per cent., respectively, while for the taxation at 6 per cent. no calculation is necessary, as all income above \$500,000 is taxed at this uniform rate. The results are shown in Table V.

TABLE V.

ANALYSIS OF ADDITIONAL TAX, SHOWING UPON WHAT INCOMES EACH TAX RATE FALLS.

Line Number.	Tax Class, Thousands of Dollars.	Income Class, Thousands of Dollars.	Number of Incomes Taxed.	Amount of Each Income Higher than the Class Taxed at this Rate.	Tax paid by Each Income Class.	Total Income Taxed in Each Class at This Rate.
1.....	20 to 50 taxed at 1%	20-50	17,961		\$1,370,554	\$137,055,400
2.....		50-75	2,618	30,000	785,400	78,540,000
3.....		75-100	998	30,000	299,400	29,940,000
4.....		100-250	1,241	30,000	372,300	37,230,000
5.....		250-500	222	30,000	66,600	6,660,000
6.....		500 and over	135	30,000	40,500	4,050,000
7.....			23,175		2,934,754	293,475,400
8.....	50 to 75 taxed at 2%	50-75	2,618		347,639	17,381,950
9.....		75-100	998	25,000	499,000	24,950,000
10.....		100-250	1,241	25,000	620,500	31,025,000
11.....		250-500	222	25,000	111,000	5,550,000
12.....		500 and over	135	25,000	67,500	3,375,000
13.....			5,214		1,645,639	82,281,950
14.....	75 to 100 taxed at 3%	75-100	998		124,523	4,150,767
15.....		100-250	1,241	25,000	930,750	31,025,000
16.....		250-500	222	25,000	166,500	5,550,000
17.....		500 and over	135	25,000	101,250	3,375,000
18.....			2,596		1,323,023	44,100,767
19.....	100 to 250 taxed at 4%	100-250	1,241		1,693,948	42,348,700
20.....		250-500	222	150,000	1,332,000	33,300,000
21.....		500 and over	135	150,000	810,000	20,250,000
22.....			1,598		3,835,948	95,898,700
23.....	250 to 500 taxed at 5%	250-500	222		647,083	12,941,660
24.....		500 and over	135	250,000	1,687,500	33,750,000
25.....			357		2,334,583	46,691,660
26.....	500 and over taxed at 6 %	500 and over	135		3,437,850	57,297,500

The figures in Table V are given by tax classes. They may be rearranged to show the incomes and the tax paid in each income class. Such a rearrangement of the material for incomes of half a million dollars and over is given in Table VI.

TABLE VI.
INCOMES OF \$500,000 AND OVER (135 IN NUMBER).

Taxation Classes, Thousands of Dollars.	Rate of Tax Per Cent.	Portion of Each Income Taxed at Each Rate	Total Income Taxed at Each Rate	Tax paid at Each Rate.
Under 20	0	0	\$2,700,000	0
20 to 50	1	\$30,000	4,050,000	\$40,500
50 to 75	2	25,000	3,375,000	67,500
75 to 100	3	25,000	3,375,000	101,250
100 to 250	4	150,000	20,250,000	810,000
250 to 500	5	250,000	33,750,000	1,687,500
500 and over	6	All	57,297,000	3,437,850
			<u>\$123,057,500</u>	<u>\$6,145,100</u>

Without repeating the component parts of each income class—all the materials are found in Table V—we can gather the following information for total incomes, including the untaxed minimum of \$20,000, which are subject to the additional tax.

Income Classes, Thousands of Dollars.	Number.	Income.
20 to 50	17,961	\$496,375,000
50 to 75	2,618	148,281,950
75 to 100	998	79,000,767
100 to 250	1,241	166,448,700
250 to 500	222	68,441,660
500 and over	135	123,057,500
Total	<u>23,175</u>	<u>\$1,081,605,977</u>

This leaves us with only the incomes from \$2,500 to \$20,000 to determine. An approximation to the total incomes should be obtainable from the numbers in the different income classes. The average income in each class has been estimated by adding to the minimum an amount equal to one third of the difference between the maximum and the minimum of each class. This estimate allows for the fact already noted that incomes fall off in number as they increase in amount. Whether the allowance is correctly made appears from a comparison of this estimate for figures already given for incomes over \$20,000. To permit this comparison and to secure a complete estimate of total income on this basis the estimate is made for all classes, though our special interest at present is in the incomes under \$20,000. The results are given in Table VII.

TABLE VII.
NUMBER OF INCOMES AND ESTIMATE OF THEIR AMOUNT.

Income Classes, Thousands of Dollars.	Number of Returns.	Estimated Income.	
		Average.	Total.
2½ to 3½.....	79,426	\$2,778	\$220,645,428
3½ to 5.....	114,484	3,889	445,228,276
5 to 10.....	101,718	6,667	678,153,906
10 to 15.....	26,818	11,667	312,885,606
15 to 20.....	11,977	16,667	199,620,459
20 to 25.....	6,817	21,667	147,703,939
25 to 30.....	4,164	26,667	111,041,388
30 to 40.....	4,553	33,333	151,765,144
40 to 50.....	2,427	43,333	105,169,191
50 to 75.....	2,618	58,333	152,715,794
75 to 100.....	998	83,333	83,166,334
100 to 150.....	785	116,667	91,583,595
150 to 200.....	311	166,667	52,833,431
200 to 250.....	145	216,667	31,416,715
250 to 300.....	94	266,667	25,066,698
300 to 400.....	84	333,333	27,999,972
400 to 500.....	44	433,333	19,066,652
500 to 1,000.....	91	666,667	60,666,697
1,000 and over.....	44	\$1,500,000	66,000,000
Total.....	357,598		\$2,982,729,225

In applying the method described to the group receiving \$1,000,000 and over, which, of course, has no upper limit, it was necessary to assign to this group a purely arbitrary estimate of the average income. The aggregate of incomes under \$20,000 appears in this table as \$1,856,533,675, while the estimate for the group \$20,000 to \$500,000 is \$999,528,853. The correct figure for the group \$20,000 to \$500,000 is \$958,548,477. We have, therefore, for this large group from \$20,000 to \$500,000 a direct comparison of actual figures and the estimate, and it appears that the correct figure is 95.9 per cent. of the estimated figure. It seems proper to assume that in the estimate of incomes under \$20,000 we have the same excess. Deducting 4.1 per cent. from the estimate of such incomes and adding to the result the correct figures for incomes from \$20,000 to \$500,000, and for incomes for \$500,000 and over, as given in a former table, we have a corrected estimate of an aggregate income of \$2,862,021,776 for ten months in 1913, of all persons who had in that period a minimum income of \$2,500. From the figures of the normal tax we had already accounted for an income of \$2,370,000,000, and if this sum be deducted from

our estimate of the total income it would appear that there is a difference of \$490,000,000 to be explained by the income received in the form of dividends, which is not subject to the normal tax. It will be interesting to inquire whether the corporation income tax throws any light upon this subject of dividend income.

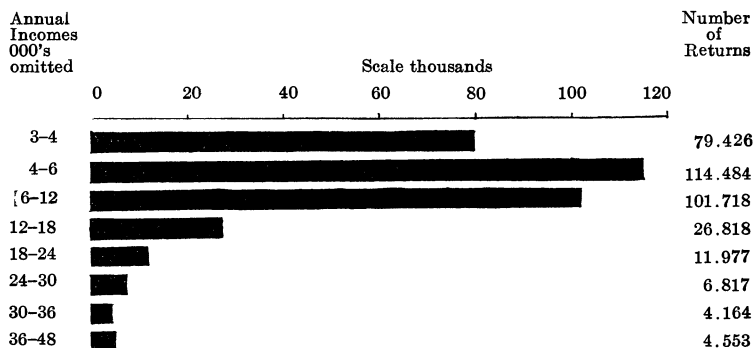


Diagram I. Incomes reported 1913 as shown in report of Commissioner of Internal Revenue

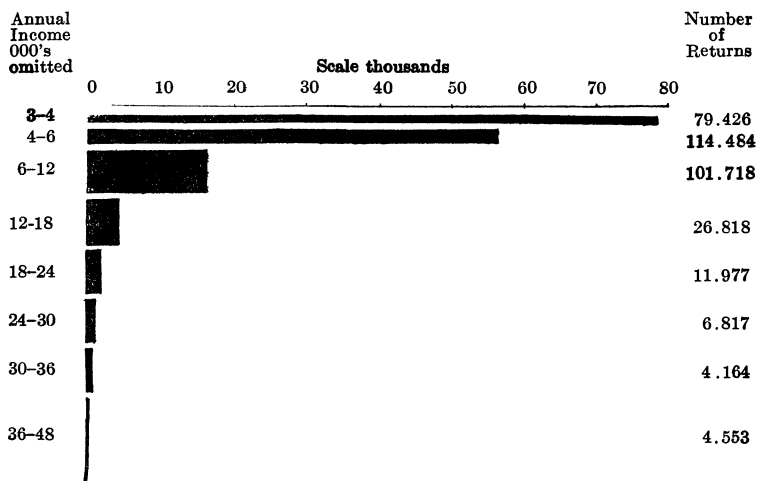


Diagram II. Incomes reported 1913

The tax upon the net income of corporations for ten months of 1913 produced \$32,456,662.67. As the tax is 1 per cent., it was therefore levied upon a corporate income of \$3,246,000,-000. How much of this corporate income was distributed in the form of dividends we have no means of knowing. If dividends averaged only 4 per cent. of the reported capital stock of \$64,000,000,000 for all corporations paying taxes, dividend payments would have amounted to \$2,640,000,000.* Of course all dividend payments do not become personal income; a large part of it is corporate income of holding companies and to some extent of investing companies, such as savings banks and insurance companies. But it does not seem unlikely that as much as \$2,000,000,000 becomes personal income. If this be correct it must be confessed that such income is not fully accounted for in the calculation of personal income which allowed only \$490,000,000 for income of this nature to income tax payers. Of course a certain portion of this dividend income goes to persons who are not affected by the income tax, whose annual incomes are less than \$3,000, but it seems doubtful whether the greater part goes to such persons.

The foregoing computation necessarily assumes that the figures are correctly reported both for the number of incomes and for the receipts at each tax rate. It would seem unnecessary to mention this assumption were it not for the fact that a closer study of the tables showing the returns of incomes on pages 112 and 113 of the report with the table giving the tax receipts, shows many inconsistencies between the tables. It may be that for the total of the United States the inaccuracies of the tables counterbalance one another and the result which we have obtained can be regarded as substantially correct.

Unfortunately the method of ascertaining incomes which is here indicated cannot be applied to the individual states because of inconsistencies between the two tables which are combined in this operation. Some of the inconsistencies are obvious and some lie below the surface. Some of the most

*In his work on "Incomes" (New York, 1915), p. 146, Dr. Scott Nearing estimates the dividends paid in 1913 by the corporations reporting to the Commissioner of Internal Revenue as between 2,300 and 2,900 million dollars.

unmistakable discrepancies between the figures are shown in the following comparison of the highest classes which are indicated by the respective tables of the Report of the Commissioner of Internal Revenue:

MAXIMUM INCOMES IN CERTAIN STATES, ACCORDING TO INCOME CLASSES SUBJECT TO ADDITIONAL TAX.

State.	Highest Income.	Group Indicated by.
	Returns of Income (pp. 112-113.)	Receipts from Additional Tax (pp. 112-113.)
District of Columbia.....	\$250,000 to \$500,000	\$500,000 and over
Florida.....	75,000 to 100,000	500,000 and over
Georgia.....	100,000 to 250,000	500,000 and over
Indiana.....	250,000 to 500,000	500,000 and over
Nevada.....	20,000 to 50,000	250,000 to \$500,000
Alaska.....	50,000 to 75,000	30,000 to 50,000
Arizona.....	100,000 to 250,000	30,000 to 50,000
Idaho.....	100,000 to 250,000	Under 20,000
Mississippi.....	100,000 to 250,000	75,000 to 100,000
Montana.....	75,000 to 100,000	Under 20,000
North Dakota.....	75,000 to 100,000	50,000 to 75,000
Utah.....	100,000 to 250,000	Under 20,000
Washington.....	250,000 to 400,000	20,000 to 50,000
Wyoming.....	100,000 to 250,000	Under 20,000

But there are other discrepancies which are not so obvious and which would be revealed only by an examination of each state. Thus for North Carolina the table on page 112 reports 2 incomes between \$250,000 and \$500,000. The additional taxation upon these 2 incomes would be as follows: At 1 per cent., \$600; at 2 per cent., \$1,000; at 3 per cent., \$1,500; and at 4 per cent., \$12,000. But the actual receipts reported from all incomes in North Carolina at the rates of 2, 3, and 4 per cent., respectively, were less than the sums here named. Again, in Michigan we find 15 incomes reported as exceeding \$250,000. Taxation at 4 per cent. falls on that part of such incomes which is above \$100,000 and below \$250,000, which, at \$6,000 for each income, should give tax receipts of \$90,000 for the 15 incomes to which reference has been made, without any consideration of other incomes which may fall between \$100,000 and \$250,000. But the receipts returned at 4 per cent. in the state of Michigan amount to only \$85,228.

There is no clue in the report of the Commissioner of Internal Revenue as to the cause of these discrepancies. The suggestion naturally occurs that in some cases the taxes are in arrears and such an explanation would cover a number of discrepancies which have been noted, but not all of them. It would not, for instance, explain that in the state of Nevada a tax has actually been paid upon an income which can be estimated at \$256,000, while no income higher than \$40,000 appears in the tabulation of returns. Moreover there is no suggestion in the report of the treasury officials that any considerable proportion of the income tax is in arrears. According to the best information which I can obtain on the subject the discrepancies between the tables are due to the fact that they have been made by different sets of clerks, and that no effort has been made to check them one against the other. It also appears that classifications have been made at different periods of the year and that some of the discrepancies may be due to changes in the classifications which had taken place as a result of the activities of the treasury department.*

In view of the discrepancies to which attention has been called, we may well hesitate to attempt to ascertain the amount of incomes for any lesser areas than for the whole United States. With the exception of the state of New York, of which it forms a part, the Borough of Manhattan with its 50,000 taxable incomes is the largest group in the United States. The number is probably large enough to render of comparatively little significance the idiosyncrasies of the tables to which we have referred. Subject to these reservations we can, therefore, ascertain for the Borough of Manhattan the dis-

* The matter herein referred to was submitted to the Commissioner of Internal Revenue, who, under date of April 5, 1915, replied concerning the discrepancies which have been noted in part as follows:

"In reply you are advised that the table on pages 112-113 shows the correct classifications, numerically by states, and was compiled by this office from the individual returns themselves.

"The receipts shown in the table on pages 192-193, both items by states and totals, represent the actual collections for the fiscal year ended June 30, 1914, verified by this office as of that date. The classifications of income shown in this table, however, are based on the reports of Collectors of Internal Revenue from the facts before them at the time of their reports; and the exigencies of administration will not permit the office, at the present time, to trace the various changes that have since been made, or that have been required to be made, in individual returns as originally rendered."

One cannot feel that the explanation is subject to any other interpretation than that given in the text. While the writer asserts in the first paragraph that the table on pages 112 and 113 shows the correct classifications because they were compiled in the central office, one cannot feel complete assurance of this fact when we have a record of receipts on incomes higher than any of those named in the classification. The correspondence admits the discrepancies and does not, I feel, offer any explanation of their cause.

tribution of incomes represented by the returns. This is shown in Table VIII.

TABLE VIII.
INCOME TAX PAYERS AND INCOMES—BOROUGH OF MANHATTAN.

Income Classes, Thousands of Dollars.	Tax Payers.		Incomes.	
	Number.	Per Cent. of U. S. Total.	Total.	Per Cent. of U. S. Total.
2.5 to 20.	44,481	13.3	\$259,152,196 (a)	14.6(a)
20 to 50.	4,058	22.5	109,592,400	22.1
50 to 75.	697	26.5	37,802,233	25.5
75 to 100.	293	29.4	26,308,233	33.3
100 to 250.	353	28.4	46,287,825	27.8
250 to 500.	91	41.0	26,170,100	33.9
500 and over.	76	56.3	96,779,417	78.6
20 and over.	5,568	23.6	342,940,025	31.7
Total.	50,049	14.0	602,092,221(b)	21.0(b)

(a) Estimated. (b) Partly estimated.

It will be noted that while Manhattan has 14 per cent. of all the taxpayers, the income which they represent is 21 per cent. of the total estimated income in the United States. Generally speaking, the share attributable to Manhattan grows as the incomes become larger. The reader will not fail to observe that more than half of all the incomes of \$500,000 and over are in Manhattan and that the income which they represent is more than three fourths of all the income of this class in the United States.

It would fall short of a complete analysis of the available figures were we to neglect the fiscal aspects of the tax. Besides considerations affecting the distribution of incomes there are others which are derivable from the report, and concern the weight of taxation, its geographical distribution, and its future fruitfulness, which may well engage our attention.

In a taxation system as composite as the income tax with its exemptions and graduated rates, there is an interest in ascertaining the total weight of the tax with reference to the total income. The total product of the tax in 1913 was \$28,253,534, and this was levied according to our calculations upon a total

income of \$2,862,021,776. Disregarding all exemptions, therefore, the taxes paid both as normal and as additional tax amounted to approximately 1 per cent. (0.98) of the total income of persons subject to income taxation. In the aggregate the normal tax was equivalent to 0.44 per cent. of the total income as computed. In view of the progressive taxation of the supertax, it would be desirable to carry out calculations similar to those indicated for each income class. Such a problem offers considerable difficulty on account of the scanty material at our disposal, regarding the normal tax. For the additional tax, however, exact information is available. Table IX exhibits the amount of additional tax paid by each income class and the resulting rate of taxation.

TABLE IX.
INCOMES OF \$20,000 OR MORE AND ADDITIONAL TAX PAID.

Income Class Thousands.	Incomes.		Additional Tax Paid.	
	Number.	Amount.	Amount.	Per Cent. of Total Income.
20 to 50.....	17,961	\$496,375,400	\$1,370,554	0.28
50 to 75.....	2,618	148,281,950	1,133,039	0.76
75 to 100.....	998	79,000,767	922,923	1.17
100 to 250.....	1,241	166,448,700	3,617,498	2.17
250 to 500.....	222	68,441,660	2,323,683	3.39
500 and over.....	135	123,057,500	6,145,100	4.13
Total.....	23,175	\$1,081,605,977	\$15,511,797	1.43

Our table compares the total additional tax paid with the total income of the persons subject to such tax and not with their taxable income alone. While incomes of over \$500,000 are subject to an additional tax of 6 per cent., this rate applies to the excess over \$500,000—not to the total income. A person enjoying an income in excess of \$500,000 pays his additional tax in the manner shown in Table VI, namely, no additional tax on \$20,000, 1 per cent. on the next \$30,000, 2 per cent. on the next \$25,000, 3 per cent. on the next \$25,000, 4 per cent. on the next \$150,000, 5 per cent. on the next \$250,000, and 6 per cent. on all beyond that, or beyond \$500,000. A person therefore with an income of \$600,000 would pay additional taxes to the amount of \$26,050, equiv-

alent to 4.34 per cent. of his entire income. His total tax would be increased by the normal tax which by reason of the personal exemption and the omission of incomes, if any, from dividends, would be somewhat less than 1 per cent. His total taxation, if he were married and had no income whatever from dividends, would be 5.33 per cent. of his total income, while if we could assume the extreme case that all his income arose from dividends, his total taxation and his additional taxation would be identical, namely, 4.34 per cent. of his total income. Table IX refers to the additional tax only, and shows that it increases from an average of 0.28 per cent. on the incomes over \$20,000 and less than \$50,000, to 4.13 per cent. for the highest income class.

While we know that the normal tax averages 0.44 per cent. of total income of all classes, we cannot add this figure to the rates above calculated for the additional tax in the several income classes, to determine total taxation in each class. There are no figures given in the official documents showing receipts from normal tax by income classes, nor can these figures be calculated with any degree of precision. We could indeed estimate the distribution of income below the tax limit for normal taxation with a slight degree of error. For if we assume that the married and unmarried taxpayers are evenly distributed among the different income classes, we have only to distribute the exempted income (p. 532) in proportion to the number of taxpayers in each class. If we should deduct the personal exemptions, so estimated, from the aggregate income of each tax class as computed or estimated in the earlier part of this paper, we should have a series of figures from which we could derive the proportion of the normal tax receipts attributable to each tax class, always, be it noted, under the assumption that dividend income is distributed among the different classes in the same proportion as other income. By such a calculation we reach the tentative result that incomes under \$20,000 paid \$5,409,000 normal tax and incomes above that sum \$7,319,000. If such were the receipts they were equivalent to a tax of 0.30 per cent. on total income of persons with less than \$20,000, and 0.68 per cent. on total income of persons with larger incomes. But these results

would doubtless be changed if we knew anything about the distribution of dividend income. If dividend income is more frequently a constituent part of larger than of smaller incomes, then the amount of normal tax paid by incomes under \$20,000 would be greater than the sum given above and the average rate of taxation would be also greater, while the converse would be true as respects incomes over \$20,000. How large the change might be it would be hazardous to estimate. The possible limits can be, however, pointed out. If there were absolutely no dividend income received by persons having less than \$20,000 income, the normal tax paid by such persons would have been \$7,478,763 or 0.42 per cent. of the total income of this class. And if all the dividend income belonged to those whose incomes exceeded \$20,000, their normal tax would have been \$5,249,275 or 0.48 per cent. of the total income of this class. It is clear that whatever the distribution of dividend incomes, as between these two groups, the normal tax would always form a larger percentage of the total income of the group with higher incomes, than of the group with lower incomes.

The conclusion seems to be warranted that for incomes of less than \$20,000 the total taxation which is all normal tax probably does not exceed four tenths of 1 per cent. of the total income of this group. It is further clear that to the rates for the additional tax shown in Table IX for incomes of \$20,000 and over, there must be added for the normal tax a figure which is somewhere between 0.45 and 0.65 per cent. of the total income, if we are to ascertain the total rate of income taxation for these classes.

If for reasons already stated we must forego an attempt to compare geographically the number of incomes with the amount of such income, the tax receipts throw some light upon how far the distribution of income by numbers differs from that by amounts. In Tables X and XI figures are given for the amount of tax receipts, both for the normal tax and the additional tax, with relative figures showing also the distribution of taxable incomes, for the same geographical areas as figured in our previous tables.

TABLE X.
INCOMES AND TAX RECEIPTS BY LEADING STATES, 1913.

Area.	Incomes Subject to Normal Tax.			Incomes Subject to Supertax.		
	Tax Paid.	Per Cent. Distribution.		Tax Paid.	Per Cent. Distribution.	
		Tax Paid.	Number of Incomes, See Table III.		Tax Paid.	Number of Incomes, See Table III.
United States.....	\$12,711,050	100.0	100.0	\$15,505,232	100.0	100.0
New York.....	5,445,937	42.8	22.9	7,076,860	45.6	31.7
Pennsylvania.....	1,243,747	9.8	9.5	1,932,348	12.5	11.8
Illinois.....	880,028	6.9	9.0	1,196,143	7.7	8.4
California.....	494,761	3.9	5.4	385,613	2.5	4.0
Massachusetts.....	670,313	5.3	5.4	835,573	5.4	8.2
Ohio.....	354,511	2.8	4.5	549,997	3.5	4.5
New Jersey.....	338,565	2.7	3.7	378,191	2.4	3.4
Missouri.....	287,876	2.3	3.3	369,182	2.4	2.8
Total.....	9,715,738	76.4	64.1	12,723,907	82.1	74.8
Other states.....	2,995,322	23.6	35.9	2,781,325	17.6	25.2

TABLE XI.
INCOMES AND TAX RECEIPTS BY GEOGRAPHICAL DIVISIONS, 1913.

Area.	Incomes Subject to Normal Tax.			Incomes Subject to Supertax.		
	Tax Paid.	Per Cent. Distribution.		Tax Paid.	Per Cent. Distribution.	
		Tax Paid.	Number of Incomes, See Table IV.		Tax Paid.	Number of Incomes, See Table IV.
United States.....	\$12,711,050	100.0	100.0	\$15,505,232	100.0	100.0
The North.....	10,506,759	82.7	74.5	14,093,115	90.9	83.1
New England.....	1,020,403	8.3	9.0	1,432,973	9.2	12.8
Middle Atlantic....	7,028,249	55.3	36.3	9,387,399	60.5	46.8
East North Central	1,778,710	14.0	19.2	2,621,603	16.9	17.3
West North Central	679,397	5.3	9.9	651,140	4.2	6.1
The South.....	1,389,525	10.9	15.6	881,661	5.7	10.3
South Atlantic.....	700,738	5.5	7.7	626,980	4.0	5.2
East South Central.	225,242	1.8	2.9	73,883	.5	1.8
West South Central	463,545	3.6	4.8	180,798	1.2	3.2
The West.....	814,766	6.4	9.8	530,456	3.4	6.7
Mountain.....	182,308	1.4	2.2	70,011	.5	1.4
Pacific.....	632,458	5.0	7.5	460,445	3.0	5.3
East of Mississippi River.....	10,753,342	84.6	75.4	14,142,838	91.2	84.0
West of Mississippi River.....	1,957,708	15.4	24.6	1,362,394	8.8	16.0

Table X shows that New York and Pennsylvania, of all the states named, pay a larger proportion of the normal tax than their proportion of the total number of incomes. This points, of course, to larger average incomes than elsewhere. In like manner these two states pay a larger percentage of the supertax than their share of the number of incomes subject to such tax. It is, however, both as respects normal tax as well as supertax, only in the case of New York that the discrepancy is marked.

Table XI showing geographical divisions, emphasizes the fact that tax receipts not only for the normal tax but especially for the additional tax, are more concentrated in the North, and particularly in the Middle Atlantic section, than are the incomes subject to taxation.

The total receipts for the first ten months' experience in the tax were, as has already been stated, upwards of \$28,000,000. It may be noted that for the year 1914 the Secretary of the Treasury estimates the receipts from the personal income tax at \$40,000,000. At the first blush it might seem that the estimated increase was somewhat excessive but there are several factors which enter into the probabilities of the case. Some of them are indicated by the Secretary of the Treasury, and others are not mentioned though doubtless they contributed towards forming his judgment of the probable income.

There are at least six factors which would lead us to anticipate greater receipts from the personal income tax in 1914 than in 1913:

1. The tax in 1914 will affect the whole year's income and this in itself would account for an addition of one fifth to the receipts were no other persons taxed than those who made returns in 1913.

2. The returns for 1914 will include the income for January and February of that year, months which were omitted in 1913 and also months in which certain kinds of income, especially receipts from interest upon securities, are abnormally heavy.

3. The system of taxation at the source will be in full vigor in 1914. Apart from the fact that this may lead to a more ac-

curate ascertainment of incomes, there can be no doubt that such taxation at the source will affect the incomes of persons not really subject to taxation because of the failure of large numbers of persons who are receiving income in comparatively small quantities from interest on securities to make the necessary declarations of exemption.

4. With the natural growth of population, other things being equal, a larger number of persons would probably be subject to the income tax in 1914 than in 1913.

5. The tax for 1914 will probably be levied more fully than in 1913 and the evasions of the tax, either through willful tax dodging or through ignorance of the law, will be less frequent.

6. As the incomes for the year will be larger, they will, so far as the additional tax is concerned, often be subject to taxation at higher rates. Thus a person whose income in 1913 was exactly \$20,000 was not subject to the additional tax, but his income for 1914 will be at least \$24,000 and the excess over \$20,000 will be taxable at 1 per cent.

As a partial offset to these various factors which will tend to increase the productivity of the income tax in 1914 as compared with 1913, we must take into account the fact that the general condition of business was less prosperous in 1914 than in 1913. That this element will have some effect can hardly be doubted although the extent of its influence is not susceptible of measurement.

From the meagre and incomplete figures which we have attempted to analyze in this paper, the most obvious conclusion is the need for far more complete information in regard to incomes and the income tax than we now possess. Returns for the year 1914 are now in the hands of the internal revenue officials. Let us hope that next year the Commissioner of Internal Revenue will tell us what these returns really contain. The system of taxation at the source will be in full vigor and new and interesting questions will arise which can only be answered by a much more detailed analysis of the figures. There seems to be no reason why the public should not know for each income class not only the number of persons included in it, but also how many are single, how many are married, what is the amount of exempted income, what the amount of

dividend income, what the amount taxed at the source, the amount of taxable income and the product of the tax. Such an analysis would be easily derivable from the income tax returns. If the information given is to be valuable, considerable attention must be given to taxation at the source, and salary payments should be distinguished from interest payments. If this is done we should be able to distinguish income from salaries and similar sources, that from dividends and that from interest. Furthermore it would seem a comparatively simple thing to ascertain revenues from business undertakings.

There are also some special questions on which the public is entitled to information. One of them concerns particularly the income received from dividends. Such an analysis of the net income of corporations as would show how much of this income is distributed in the form of dividends, is highly desirable. It is also important to ascertain how much of such dividend income goes to other corporations and is taxed again through their income tax, and how much of it goes to individuals. If the latter point were ascertained and the declarations of the individual income tax properly tabulated, we should be able to see how much of the tax on the dividends falls upon those persons who are liable to income taxation, and how much falls upon persons who are not so liable, either because their income is less than \$3,000 per annum or because they are educational and other institutions exempted from the payment of the tax. A further question which will be of particular interest in the coming year, when the system of taxation at the source is in full swing, relates to the payment of interest by corporations. Under the law the tax on such interest must be paid at the source unless there is filed for the individual recipients declarations of exemption. It is undoubtedly a fact that a considerable number of holders of small amounts will not file such notices of exemption and that consequently so far as the interest on the securities is concerned it will really be paid for persons who are not subject to the personal income tax. If the amount of tax paid at the source by corporations should be compared with the aggregate interest noted in the individual returns as taxed at the source, we

should then be able to ascertain how far the former exceeded the latter.

These are simple illustrations of the kind of information which could be derived from the income tax returns if they were properly systematized and presented to the public. They are in fact a veritable mine of economic information, but it is a mine which needs to be worked. Surely the government must have at its disposal the advice of expert economists and statisticians who could show what facts ought to be presented to the public, and how the material should be analyzed to obtain such information. Unless appearances are misleading, the Commissioner of Internal Revenue did not seek such advice in preparing his first report. With a full year's returns for 1914, and with the system in complete operation, it is to be hoped that these problems will receive more adequate attention.